Special Marine Protected Areas Action Plan

Goal Statement

To determine the role, if any, of additional Marine Protected Areas in maintaining the integrity of biological communities in the Monterey Bay National Marine Sanctuary, and to protect, and where appropriate, restore and enhance natural habitats, populations and ecological processes. If additional MPAs are to be created, provide for the design of MPAs that are compatible with the continuation of long-term sustainable fishing in the Sanctuary, as fishing is a key cultural and economic component of the region.

The action plan will outline the framework for coordinating with and providing input to appropriate state and federal agencies on the need for, purpose, design and implementation of MPAs within the MBNMS region, whether initiated or coordinated by the Sanctuary or other agencies. A multi-stakeholder workgroup will work together to implement the components of the action plan.

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INTRODUCTION

Marine Protected Areas (MPAs) are a management tool that may include a range of strategies from fully restricting harvesting of marine life within a designated geographic area, allowing take of selected species or restricting other types of human activities. Scientific research has indicated that carefully crafted MPAs can be effective tools for conservation of biodiversity and habitats. MPAs may be used as a means to restore degraded areas and as a precautionary tool to conserve a range of representative habitats and biodiversity. Well-designed MPAs generally contain higher species diversity, more abundant species, and larger fish within their boundaries relative to impacted areas of similar habitat outside the reserve. These larger fish produce many more young than do smaller fish. MPAs are one of many useful tools that can be used to prevent, slow, or reverse negative habitat and ecosystem changes within the Sanctuary. MPAs may also cause unintended positive or negative ecological, social or economic consequences. As the science of MPAs is evolving, care must be given to actively evaluate emerging MPA studies, whether they show positive or negative impacts of MPAs. The MBNMS will also consider other management tools that may enable the Program to meet its conservation goals.

The MBNMS received many comments during the scoping period of the Joint Management Plan Review (JMPR) requesting increased protection of the ecosystem by taking the lead in implementing a network of MPAs in State and Federal waters. Scoping period comments also asked that regulatory authority on fishing and MPAs remain with existing State and Federal agencies, and that any consideration by the MBNMS of MPAs should be based on consensus with the fishing industry. The MBNMS believes that any consideration of MPAs should and will be a joint effort with the participation of many diverse stakeholders, including strong participation of the fishing community to tap into their extensive knowledge and to consider socioeconomic impacts of alternative MPA designs, as well as participation from other agencies, scientists, environmental organizations and the public.

Strong interagency collaboration with the National Marine Fisheries Service, Pacific Fisheries Management Council, and the California Department of Fish and Game will be an essential component during the evaluation of the need for MPAs and in their design. The Sanctuary will facilitate continuation of a multi-stakeholder workgroup representing agencies, the fishing community, environmental organizations, scientists and other stakeholders to carry out the evaluations outlined in the plan below. If the workgroup ultimately recommends the establishment and locations of specific MPAs, they could be implemented in future years via a variety of mechanisms and agencies. Depending on the final design of MPAs, their implementation could draw on authorities of various state and federal agencies under the

Magnuson-Stevens Act, the National Marine Sanctuaries Act, the state's Marine Life Protection Act and/or the Marine Managed Areas Improvement Act.

Workgroup Planning

To address the issue of the role, if any, of MPAs in protecting Sanctuary resources the MBNMS developed a Workgroup of the Sanctuary Advisory Council to provide guidance on several aspects of MPAs. Since the MBNMS is a "marine protected area" itself, this Action Plan is using the term Special Marine Protected Areas to distinguish these smaller, more focused MPAs that might limit harvest from the MBNMS itself.

The Workgroup was asked to outline the framework for the need for, purpose, design and implementation of MPAs within the MBNMS region. The framework describes the process, goals and criteria for effective special MPAs and provides recommendations for future steps to evaluate the issue. Although the revised management plan itself will not specify exact locations for special MPAs, the Sanctuary will continue the planning effort in the future with the Workgroup to conduct additional evaluations using the framework document as a guide. Much detailed work remains to conduct a thorough evaluation of the issue, including a more detailed assessment of the need for MPAs, identification of specific habitats and ecological processes that could benefit from protection, identification of potential and existing threats, development of site-specific goals, consideration of design criteria which incorporate biological and socioeconomic issues, integration with other management efforts, and articulation of monitoring, education and enforcement needs.

The Workgroup refined a draft list of future work topics that address these and other issues in the special MPA plan. This list, shown below, will provide the basis for a longer-term work program for implementation, with continued involvement by the Workgroup. The Workgroup identified the strategies below as necessary steps to achieving the objectives laid out in the goal statement. Strategy one addresses the need to form working partnerships with stakeholders and other agencies that will facilitate the implementation of the plan. Strategy two focuses on the evaluation of the need for MPAs and identification of the resources to be protected. Strategies three through six focus on effective design of MPAs, considering biological issues, patterns of use, socioeconomics and potential for integration with other management measures. Strategies seven through nine focus on considering education, enforcement and research programs during both MPA design and implementation phases. Strategies ten and eleven focus on implementation issues related to phasing of MPAs and to coordination of interagency designation processes, assuming a decision is reached in future years regarding the need for MPAs and on their locations.

Strategy MPA-1: Develop Partnerships

Activity 1.1: Develop Partners During Evaluation, Goal Setting, and Design Phases

A. Continue multi-stakeholder workgroup for evaluation and design, and allow for continued involvement of local communities
B. Ensure constituent involvement and adequate notification for public involvement
C. Outline roles and steps for involvement of Sanctuary, NMFS, PFMC, and CDFG and identify common goals
D. Develop partnerships with CDFG, NMFS, PFMC and consider joint staffing during evaluation and design phases
E. Evaluate linking to and coordination with potential PFMC evaluation of MPAs
F. Ensure coordination with any processes in state waters

Status: Phase 1
Potential Partners: NMFS, CDFG, PFMC, local research institutions, fishermen, MPA working group members

Strategy MPA-2: Conservation Goals and Objectives and Habitats and Resources to be Protected

Strategy Description
This strategy outlines activities the working group must address in defining more specific conservation objectives for special MPAs, considering the range of habitats and ecological interactions which may warrant protection, and the threats to those resources.

Activity 2.1: Develop Specific Conservation Goals and Objectives for Special MPA Program, Building on General Goal Statement Above as Part of Ongoing Multi-stakeholder Process

Status: Phase 1
Potential Partners: MPA Group Members, NMFS, CDFG, fishermen, scientists

Activity 2.2: Consider Range of Representative Habitat Type- e.g. Hard Bottom, Soft Bottom, Kelp Forest, Pelagic, Rocky Intertidal, Estuarine, etc.

Status: Phase 1
Potential Partners: NMFS, CDFG, Fishermen, MPA Group Members

Activity 2.3: Identify Key Ecological Interactions, Including Predator-Prey Relationships, Migratory Patterns, Life History Stages, and the Role of Biogenic Habitat (e.g. kelp)

Status: Phase 1
Potential Partners: NMFS, CDFG, fishermen, MPA group members

Activity 2.4: Identify Emerging or Existing Threats to These Habitats, Resources or Interactions

Status: Phase 1
Potential Partners: NMFS, PFMC, CDFG, fishermen, MPA group members

Activity 2.5: Identify Resource or Habitat-specific Objectives for Special MPAs and/or Network/Collection of Special MPAs

Status: Phase 1
Potential Partners: MPA group members

Activity 2.6: Include Mix of Degrees of Habitat Health Ranging from Areas that are Minimally Disturbed and Set Aside for Protection, to Historically Productive, Currently Underused Habitats Set Aside to Allow Recovery

Status: Phase 1
Potential Partners: NMFS, CDFG, fishermen, MPA group members

Strategy MPA-3: General Design Criteria

Strategy Description
This strategy outlines the various criteria the working group must describe and evaluate in designing special MPAs, including biological issues, human use patterns, questions of scale and size, and practical implementation issues.

Activity 3.1: Consider Biological and Physical Factors

A. Consider biological factors identified above in Strategy MPA-2.
B. Consider proximity to ecological "hotspots."
C. Evaluate physical oceanographic factors such as currents, upwelling, etc.
D. Consider biological relationships between State and Federal waters for a network/collection of special MPAs.

Status: Phase 1
Potential Partners: NMFS, PFMC, Fishermen, MPA Group Members, Local Research Institutions

Activity 3.2: Consider Human Use Patterns

A. Evaluate distribution of human activities on the water. (Phase 1)
B. Evaluate how locations and distances may impact different user groups and local communities. (Phase 1)
C. Consider distances from port and safety issues. (Phase 1)
D. Evaluate potential impacts of displacement of fishing effort to other areas. (Phase 2)
E. Consider access by other target users, such as divers, kayakers, shore fishermen, researchers. (Phase 2)
F. Map location of existing small reserves, areas closed to certain types of fishing, and other types of MPAs. (Phase 1)
G. Consider locations of other types of human threats—e.g. water quality, landslides, vessel traffic, MPWC. (Phase 1)

Potential Partners: Fishermen, USCG, Harbormasters, CDBW, CDFG, Fishing Clubs, NOAA Rec. Survey, Dive Shops, Whale Watchers, Kayak Companies, Yacht Associations, MPA Center, NMFS, Divers, Researchers

Activity 3.3: Address Considerations of MPA Size and Scale

A. Ensure that special MPAs are sized appropriately to meet objectives, considering biological and socioeconomic factors.
B. Consider distances between special MPAs and between types of special MPAs.
C. Evaluate the need for a network of special MPAs as opposed to individually sited special MPAs.
D. Determine appropriate scale of a network/collection.

E. Incorporate variability in special MPA design to improve effectiveness evaluations.

Status: Phase 2
Potential Partners: Fishermen, USCG, Harbormasters, CDBW, CDFG, Fishing Clubs, NOAA Rec. Survey, Dive Shops, Whale Watchers, Kayak Companies, Yacht Associations, MPA Center, NMFS, Divers, Researchers

Activity 3.4: Consider Design Issues Specific to Federal Waters

A. Define conditions where it is beneficial to extend state MPAs to federal waters, and when separate special MPAs may be more appropriate
B. Evaluate type and orientation of extension that may be appropriate across state and federal waters, and consider the benefits and disadvantages of doing so
C. Evaluate potential for separate offshore special MPAs focused on biological hotspots correlated with persistent physical and oceanographic features
D. Evaluate the persistence of pelagic hotspots over time
E. Consider practical feasibility of pelagic restrictions, including possibility for temporary closures

Status: Phase 1
Potential Partners: NMFS, CDFG, PFMC, local research institutions, fishermen, MPA working group members

Activity 3.5: Consider Practical Implementation Issues

A. Consider proximity and ability to enforce.
B. Consider ability to monitor for effectiveness evaluation.

Status: Phase 2
Potential Partners: USCG, CDFG, MPA Center, NMFS, local research institutions

Strategy MPA-4: Types of Use

Strategy Description
Special MPAs may vary from full no-take reserves which allow no harvest to areas which allow some levels of harvest, and areas which allow varying types of non-extractive uses. This strategy outlines the need for the working group to evaluate options for varying types of use in designing special MPAs

Activity 4.1: Consider mix of options that may restrict certain human activities at selected sites in a special MPA or special MPA network/collection

Status: Phase 2
Potential Partners: Fishermen, CDFG, MPA working group members, NMFS, local research institutions, PFMC, divers

Activity 4.2: Consider relationship between state MPA classifications and Sanctuary designations

Status: Phase 2
Potential Partners: CDFG, MPA working group members, NMFS, local research institutions

Strategy MPA–5: Integrated Management

Strategy Description
This strategy outlines issues the working group must consider in coordinating the development of special MPAs with other types of management measures.

Activity 5.1: Identify and Evaluate Other Existing or Planned Ecosystem, Fishery, or Land-based Management Tools, as Feasible Within Staff Limitations

Status: Phase 1
Potential Partners: CDFG, MPA Center, NMFS, local research institutions, PFMC, fishermen

Activity 5.2: Identify and Evaluate Gaps, Limits and Constraints of Existing Tools, as Feasible Within Staff Limitations

Status: Phase 1
Potential Partners: CDFG, MPA Center, NMFS, local research institutions, PFMC, fishermen

Activity 5.3: Evaluate Means to Effectively Integrate and Coordinate Special MPAs With These Tools to Leverage and Strengthen Efforts and Avoid Duplication

Status: Phase 2
Potential Partners: CDFG, MPA Center, NMFS, local research institutions, PFMC, fishermen

Activity 5.4: Use Special MPAs to Help Leverage Agency Resources to Address Multiple Threats to Key Sites, Including Land-based Activities

Status: Phase 2
Potential Partners: CDFG, MPA Center, NMFS, local research institutions, Cal-Trans

Activity 5.5: Identify and Consider Possible Synergies Between Land-based Protected Areas (e.g. state parks) and Adjacent Special MPAs For Staffing, Education, Enforcement, Research, or Reduction of Land-based Threats

Status: Phase 2
Potential Partners: State Parks, CDFG, MPA Center

Strategy MPA-6: Socioeconomic Impact Analysis and Mitigation

Strategy Description
This strategy outlines activities to assess potential negative and positive socioeconomic impacts of MPAs during the design and post-design stages, and steps to mitigate potential negative effects.

Activity 6.1: Identify Types of Socioeconomic Analyses to Assist in the Design and Evaluation of Biologically Effective Special MPAs That Will Allow Continuation of Sustainable Fishing Practices and Sustainable Communities

A. Evaluate how the community is affected, including cultural and economic sustainability of both consumptive and nonconsumptive factors and values.
B. Evaluate user groups and ports affected, short and long-term effects, and potential for buffering or reducing negative effects
C. Consider economic uses that may be improved by designation of special MPAs
D. Consider social values of a wide variety of different people in evaluating special MPAs

Status: Phase 1 for background studies to assist in design, Phase 2 for later studies to evaluate design
Potential Partners: CDFG, MPA Center, NMFS, local research institutions, PFMC, fishermen, socioeconomists, user groups

Activity 6.2: Prioritize Studies Needed and Ensure Their Implementation, Including Those Required by NEPA

Status: Phase 1
Potential Partners: CDFG, MPA Center, NMFS, local research institutions, PFMC, fisher, Socio-economists, user groups

Activity 6.3: Work with NOAA and Department of Commerce to Expand/Develop Economic Mitigation Programs for Users That May be Impacted

Status: Phase 2
Potential Partners: CDFG, NMFS, local research institutions, PFMC, fisher, Socio- economists

Strategy MPA-7: Enforcement and Compliance Program

Strategy Description
This strategy outlines activities needed to design an effective enforcement program.

Activity 7.1: Identify Components of an Effective Enforcement Program and Implementation Mechanisms to Provide Adequate Surveillance on the Water and in the Air

Status: Phase 2
Potential Partners: CDFG, USCG, State Parks

Activity 7.2: Develop Partnerships and Cooperative Interagency Enforcement Plans

Status: Phase 2
Potential Partners: CDFG, USCG, State Parks, MPA working group members

Activity 7.3: Ensure Adequate Training of Enforcement Officers in MPA Management and Regulations

Status: Phase 2
Potential Partners: CDFG, USCG, State Parks, NOAA OLE

Activity 7.4: Work to Facilitate Compliance via Tools such as GPS Systems

Status: Phase 2
Potential Partners: CDFG, USCG, State Parks, PFMC

Activity 7.5: Enlist Community Participation in Special MPA Management and Enforcement to Maximize Cost-effectiveness of Enforcement Program and Enhance Compliance

Status: Phase 2
Potential Partners: CDFG, USCG, State Parks, community groups

Strategy MPA-8: Education and Outreach Program

Strategy Description
This strategy outlines outreach and education needs during both the design and post-design phases.

Activity 8.1: Identify Target Audiences and Develop Components of an Effective Education and Outreach Program

Status: Phase 2
Potential Partners: SEP, NMFS, CDFG, PFMC

Activity 8.2: Conduct Regional Workshops to Share Information and Gather Input From Fishing Leaders and the Community After Special MPA Design Criteria are Determined by Multi-stakeholder Groups

Status: Phase 2
Potential Partners: SEP, NMFS, CDFG, PFMC, fishermen, MPA working group members

Activity 8.3: Consider ongoing education potential of individual reserve locations

Status: Phase 2
Potential Partners: SEP, NMFS, CDFG, PFMC, local research institutions

Activity 8.4: Link Efforts to General Education Strategies on Fisheries (a separate working group) and to MBNMS Regional Education and Outreach Plans

Status: Phase 2
Potential Partners: SEP, NMFS, CDFG, PFMC, fishing interest organizations, FIRE Working Group

Activity 8.5: Integrate Education with Enforcement and Research

Status: Phase 2
Potential Partners: SEP, NMFS, CDFG, PFMC, USCG, State Parks

Strategy MPA-9: Research and Monitoring Program

Strategy Description
This strategy outlines activities needed to develop a research and monitoring program which will assess and distribute information on the biological effectiveness of the special MPAs and their impacts on patterns of human use.

Activity 9.1: Design and Conduct Biological Effectiveness Evaluations Linked to Specific Goals of Special MPAs

A. Evaluate biological changes within and outside of special MPAs
B. Include comparisons to adequate control sites
C. Distinguish between natural and anthropogenic changes
D. Evaluate potential spillover effect to local populations

Activity 9.2: Evaluate Human Activities and Changes Relative to Specific Goals of Special MPAs

A. Assess consumptive and non-consumptive use patterns inside and outside special MPAs
B. Determine effects of scientific monitoring
C. Include observer program on research and fishing vessels
D. Monitor socioeconomic changes in user groups after special MPAs are established

Activity 9.3: Coordinate Monitoring and Data Distribution

A. Coordinate special MPA monitoring with other biological monitoring in the region and link to MBNMS/SIMoN
B. Involve fishermen and divers in monitoring activities
C. Coordinate with other sanctuaries conducting special MPA monitoring
D. Package and distribute readily understood monitoring information and effectiveness evaluations to decision-makers, fishermen and public

Status: Phase 2
Potential Partners: NMFS, CDFG, PFMC, local research institutions, fishermen, other stakeholders

Strategy MPA-10: Timing Strategies and Phasing / Effectiveness Evaluations

Strategy Description
This strategy outlines activities for evaluating the potential for phasing in the implementation of special MPAs over time, as well as development of a defined process for adaptive management.

Activity 10.1: Evaluate Potential Benefits and Disadvantages of Phasing

Activity 10.2: If Phasing is Considered Appropriate, Develop Criteria for Establishing a Reasonable First Phase

Activity 10.3: Determine Criteria for Frequency of Effectiveness Evaluation of Special MPAs, Linking Criteria to Site-specific Goals

Activity 10.4: Establish Criteria for When Evaluations Should Lead to Adaptive Management or Changes in MPAs Based on Improved Knowledge

Status: Phase 2
Potential Partners: NMFS, CDFG, PFMC, local research institutions, fishermen, other stakeholders, MPA working group members

Strategy MPA-11: Interagency Coordination and Implementation in Federal and State Waters

Strategy Description
This strategy outlines the procedures and coordination for special MPA implementation and for ensuring interagency coordination in the process.

Activity 11.1: After Identification of Special MPA Needs, Feasibility, Site-specific Goals and Designs as Outlined Above, Identify and Recommend the Most Appropriate Process and Agency to Implement

Note: Options for implementing MPAs as of 2003 are included below as background material. The working group did not try to reach consensus on these options and did not recommend which of these options or others may be appropriate once strategies 1-10 are completed. The group also recommends further legal review of the current and future options.

A. For Federal waters, options and considerations as of 2003 include:

- PFMC could adopt special MPAs under its own statutory authorities under Magnuson Stevens, provided the species covered are addressed by a Fishery Management Plan (FMP) and state landing laws could be used to restrict landings of non-FMP species; or

- PFMC could be given the opportunity to draft regulations drawing on authorities of the National Marine Sanctuaries Act, as outlined in subsection 304 (a)(5) of the Act, allowing it to address species not covered by a FMP

- If PFMC declines to draft regulations under either the Magnuson Stevens Act or the National Marine Sanctuaries Act, NOAA could prepare the draft regulations drawing on authorities in NMSA.

- Promulgation of regulations under the NMSA would require amendment of the 1992 MBNMS designation document since regulation of fishing activities is not identified as falling within the scope of current or future regulations. As outlined in the 1992 designation document, any future amendment of the designation document to regulate fishing activity could only occur in consultation with fishery management agencies, the fishing community, and the public, and would be subject to formal public hearings, EIS preparation, and Congressional notification requirements. A revision of the designation document could be constrained to focus only on MPA designation and not on fishery regulations in general.

B. For State waters, options and considerations as of 2003 include:

- The State of California (through the Fish and Game Commission and/or the Park and Recreation Commission) could adopt special MPAs pursuant to its authorities under the Marine Managed Areas Improvement Act and these MPAs could potentially be ultimately incorporated into a statewide MLPA plan.

- NOAA could prepare draft regulations drawing on authorities in the NMSA. The same process described above regarding amending the designation document would apply, with the additional condition that the approval of the governor would also be required.

Status: Phase 2
Potential Partners: NMFS, CDFG, DPR, PFMC, NOAA General Counsel

Activity 11.2: Ensure Coordination between State and Federal Implementation Measures and Timelines

Since state and federal implementation may occur via different agencies, ensure adequate coordination of implementation outcomes related to design and phasing.

Status: Phase 2
Potential Partners: NMFS, CDFG, DPR, PFMC, NOAA General Counsel, MPA workgroup members